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10/783,718	02/20/2004	William A. McCarty	KSCII.007CP2	5600

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EXAMINER	
LAO, LUN S	

ART UNIT	PAPER NUMBER
2614	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

jcartee@kmob.com
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Office Action Summary	Application No.	Applicant(s)	
	10/783,718	MCCARTY ET AL.	
	Examiner	Art Unit	
	LUN-SEE LAO	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *05 May 2009*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *47-81* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *47-81* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *05-05-2009*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Introduction

1. This action is response to the AMENDMENT filed on 05-05-2009. Claims 1-46 have been cancelled and claims 47 and 75 have been amended and claim 81 has been added. Claims 47-81 are pending.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 05-05-2009 has been entered.

Claim Rejections - 35 USC § 112

3. Claim 66 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 66 recited " the transmitter is configured to transmit to at least two speakers, and wherein the processor is capable of generating different control signals to be transmitted to the two speakers". The applicant point out paragraph [0032]

and [0116] which it will support the limitation as recited in claim 66. However, the examiner reads it carefully and can not find that the specification discloses how "the processor generating different control signals to be transmitted to the two speakers" will be performed. It is not supported in the specification nor in any claim originary presented and any figures. Therefore the 112 first paragraph rejection will be maintained.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 47, 49-59, 61-63 and 71-75 are rejected under 35 U.S.C. 102(e) as being anticipated by Swix et al. (US 2004/0250273).

Consider claim 47 Swix teaches a device for transmitting signals to speakers, the device comprising (see fig.1):

at least one input receiving an audio signal from at least one input device(see fig.1 (12,21,32), the audio signal being encoded in a channel format having multiple channels (95, 141,142,143,144); a processor (100) converting the received audio signal into one or more signals (see fig.1 (12,21,32) comprising an output signal of a selected single

channel(95, 141,142,143,144), the processor being capable of converting an audio signal from any of the following group: a television(40), a compact disc player, a digital video disc player, a MP3 player(80), a set-top box(300), a personal computer, and a stereo receiver(60);

a destination selection unit(101 (router)) configured to select at least one speaker from a plurality of speakers(60,40) to receive the output signal; and a transmitter (142,143,144) connected to the plurality of speakers via a network and configured to transmit the output signal to the selected speaker(60 and see page 3 [0035]-page 4[0044]).

Consider claim 49-55 Swix teaches the device of wherein the transmitter is connected to the plurality of speakers via a wireless network(see fig. 1 and page 4[0042]); and the device, wherein the network is RF(see fig. 1 and page 2[0042]); and the device wherein the network is IR(see fig. 1 and page 4[0023]); and the device wherein the input is further configured to receive a textual signal and wherein the transmitter is configured to send the textual signal to a display device(see fig. 1 and page 4[0041]-[0044]); and the device wherein the processor is further connected to a display device configured to be a user interface for the processor(see fig.1 and page 2 [0023]); and the device wherein the input is further configured to receive a video signal and wherein the transmitter is configured to send the video signal to a display device(see fig. 1 and page 4[0041]-[0044]); and the device wherein the input is configured to receive an analog signal, wherein the device further comprises a converter configured to convert the analog signal into a digital signal(see page 4[0038]).

Consider claims 56-59 Swix teaches the device wherein the audio signal is encoded in a channel format, wherein the processor is configured to decode the audio signal according to the channel format of the audio signal and generate the output signal(see page 4[0038]-[0044]); and the device wherein the audio signal is encoded in one of the following channel format: DTS, Dolby Digital, and SRS(see page 4[0038]-[0044]); and the device wherein the processor is configured to decode the audio signal and select the at least one speaker form the plurality of speakers for transmission based on a channel format of the audio signal (see figs 1-2 and page 4[0038]-[0044]); and the device wherein the destination selection unit is configured to select the at least one speaker based on user input(see figs.1-3 and page 2 [0023]-page 3 [0026]).
Consider claims 61-63 Swix teaches the device further comprising a plurality of connectors and an input selector, wherein at least two of the connectors are configured to connect to different devices, and wherein the input selector is reconfigurable by a user to select one of the connectors and receive an audio signal from the selected connector(see figs.1-2 and page 4[0038]-[0044]); and the device wherein the connectors are configured to connect to at least one of the following inputs: analog, digital, SPDIF, and an inter IC sound (I2S) format (see page 4[0038]-[0044]); and the device wherein the device is located inside or proximate to at least one of the following input devices: a television, a compact disc player, a digital video disc player, a MP3 player, a set-top box, a personal computer, and a stereo receiver(see figs.1-2 and page 4[0038]-[0044]).

Consider claims 71-74 Swix teaches the device wherein the transmitter further comprises an encryption module configured to encrypt the output signal prior to transmission(see fig.2 and page 5[0045]-[0048]); and the device wherein the processor (100, 60,70,80,300,40,50 in fig.1)) is capable of generating a first and a second output signal, the first signal being different from the second signal, and the transmitter transmits the first output signal to a first speaker and the second output signal to a second speaker, the first and second speaker being selected from the plurality of speakers(60 and see page 3 [0035]-page 4[0044]); And the device further comprising a control input receiving control signal from a user, wherein the processor generates the at least one output signal based on the control signal from a user(see figs.1-3 and page 4[0038]-[0044]); and the device wherein the transmitter is connected to a speaker via a receiver within or proximate to the speaker(see figs.1-2 and page 4[0038]-[0044]).

Consider claim 75 Swix teaches a device for transmitting signals to speakers, the device comprising(see fig.1): means for receiving an audio signal from at least one input device(see fig.1 (12,21,32), the audio signal being encoded in a channel format having multiple channels(95, 141,142,143,144); means(see fig.1 (100) for converting the received audio signal into one or more signals(see fig.1 (12,21,32) an output signal of a selected single channel(95, 141,142,143,144), the converting means (100)being capable of converting an audio signal from any of the following group: a television(40), a compact disc player, a digital video disc player, a MP3 player(80), a digital audio tape player, a set-top box(300), a personal computer(50), a stereo player(60), and a media center; a destination selection unit(101 (router)) configured to select at least one

speaker from a plurality of speakers(40,50,60) to receive the output signal; and a transmitter (142,143,144) connected to the plurality of speakers(60) via a network and configured to transmit the output signal to the selected at least one speaker(60 and see page 3 [0035]-page 4[0044]).

6. Claims 76-81 are rejected under 35 U.S.C. 102(e) as being anticipated by Shdema et al. (US2002 /0072816).

Consider claim 76, Shdema teaches a device comprising(see fig.1): at least one input receiving an audio signal from at least one input device(see fig.2); an amplifier module for audio signal amplifying(see fig.2 (120), signal input from 126); a transmitter (see fig.1 (110)) connected to at least one speaker via a network(114); and a processor(see fig.2 (102)) configured to process the audio signal and to generate a first output audio signal(input signal from 130) and a second output audio signal(the output signal from 128), wherein the first output audio signal (signal output from 126) is sent to the amplifier module(120 (CPU)) and the second output audio signal(the output signal from128) is sent to the speaker(150, see page 4 [0034]- {0045]).

Consider claims 77-81, Shdema teaches the device wherein the processor is capable of converting an audio signal from any of the following group: a television, a compact disc player, a digital video disc player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center (see page. 6 [0057]); and the device wherein the processor is capable of converting an audio signal from at least one of the following group: a television, a compact disc player, a digital video disc

player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center(see page. 6 [0057]); the device wherein the transmitter(see fig.1 (110)) is connected to a plurality of speakers via a network(114), the device further comprising a destination selection unit (108) configured to select at least one speaker from the plurality of speakers to receive the output signal(150, see page 4 [0034]- {0045]); and the device wherein the amplifier module(see fig.2 (130)) is located in proximity to the transmitter(see fig.1 (110) and page 4 [0034]- {0045]); and the device wherein the second output audio signal(see fig.2 (128)) is sent to the speaker via the transmitter(see fig.1 (110) and page 4 [0034]- {0045]).

7. Claims 47 and 75-81 are rejected under 35 U.S.C. 102(e) as being anticipated by Tamayama (US 2002/0048381).

Consider claim 47 Tamayama teaches a device for transmitting signals to speakers, the device comprising (see fig.4A)):

at least one input receiving an audio signal from at least one input device(see fig.1 (10), the audio signal being encoded in a channel format having multiple channels(RLS,RCS,RRS);

a processor (20) converting the received audio signal into one or more signals comprising an output signal of a selected single channel(RLS,RCS,RRS), the processor being capable of converting an audio signal from any of the following group: a television(17), a compact disc player, a digital video disc player, a MP3 player, a set-top box, a personal computer, and a stereo receiver(20);

a destination selection unit(21,22) configured to select at least one speaker from a plurality of speakers(RLS,RCS,RRS) to receive the output signal; and a transmitter (32) connected to the plurality of speakers via a network and configured to transmit the output signal to the selected speaker(see page 2 [0026]-{0032], page 3[0040]).

Consider claim 75 Tamayama teaches a device for transmitting signals to speakers(see fig.4A), the device comprising: means (10) for receiving an audio signal from at least one input device, the audio signal being encoded in a channel format having multiple channels(RLS,RCS,RRS); means(20) for converting the received audio signal into one or more signals an output signal of a selected single channel(RLS,RCS,RRS), the converting means (20)being capable of converting an audio signal from any of the following group: a television(17), a compact disc player(10), a digital video disc player, a MP3 player, a digital audio tape player, a set-top box(300), a personal computer, a stereo player(20), and a media center; a destination selection unit(21,22) configured to select at least one speaker from a plurality of speakers (RLS,RCS,RRS) to receive the output signal; and a transmitter (32) connected to the plurality of speakers(RLS,RCS,RRS) via a network and configured to transmit the output signal to the selected at least one speaker(see page 2 [0026]-{0032], page 3[0040]).

Consider claim 76, Tamayama teaches a device comprising(see fig.4A): at least one input receiving an audio signal from at least one input device(10); an amplifier module for audio signal amplifying(15); a transmitter (32) connected to at least one speaker via a network (RLS,RCS,RRS); and a processor(13) configured to process the audio signal

and to generate a first output audio signal(15) and a second output audio signal(27), wherein the first output audio signal is sent to the amplifier module(15) and the second output audio signal(28) is sent to the speaker(see page 2 [0026]-{0032], page 3[0040]).

Consider claims 77-81, Shdema teaches the device wherein the processor is capable of converting an audio signal from any of the following group: a television, a compact disc player, a digital video disc player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center (see fig.4A and page 2 [0026]-{0032]); and the device wherein the processor is capable of converting an audio signal from at least one of the following group: a television, a compact disc player, a digital video disc player, a MP3 player, a digital audio tape player, a set-top box, a personal computer, a stereo player, and a media center(see page. 6 [0057]); the device wherein the transmitter(see fig.4A (32)) is connected to a plurality of speakers via a network(114), the device further comprising a destination selection unit (21, 22) configured to select at least one speaker from the plurality of speakers to receive the output signal(see page 2 [0026]-{0032], page 3[0040]); and the device wherein the amplifier module(see fig.4A (15)) is located in proximity to the transmitter(see page 2 [0026]-{0032], page 3[0040]); and the device wherein the second output audio signal(see fig.4A (28)) is sent to the speaker via the transmitter(see page 2 [0026]-{0032], page 3[0040]).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

9. Claims 48 and 69-70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swix et al. (US 2004/025073).

Consider claim 48, Swix teaches the device wherein the transmitter is connected to the plurality of speakers via a network(see fig.1); but Swix does not explicitly teach the network is a powerline. Since, Swix does not limit his network system to any specific kind. The network is a powerline is well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the audio system as taught by Swix could have used an network is a powerline as claimed. Since the system of Swix would have operated well using network is a powerline for communication system.

Consider claims 69-70, Swix teaches plurality of speakers(see fig.1) (see fig.1); but Swix does not explicitly teach wherein the plurality of speakers comprises a subwoofer; and wherein the plurality of speakers comprises a surround speaker. Swix does not limit his loudspeaker to any specific kind. a subwoofer speaker and surround speaker are well known in the art (office notice is taken by the examiner).

Therefore, it would have been obvious that the digital video broadcast system as taught by Swix could have used a subwoofer speaker and surround as claimed. Since

the system of Swix would have operated well using a subwoofer speaker and surround speaker to enhance the audio sound output.

10. Claims 60 and 64-68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Swix et al. (US 2004/025073) in view of Shdema et al. (US2002 /0072816).

Consider claim 60, Swix does not explicitly teach the device further comprising an amplifier module, wherein the processor is configured to process the audio signal and to send a first portion of the output signal to the amplifier module and a second portion of the output signal to the transmitter.

However, Shdema teaches the device further comprising an amplifier module, wherein the processor (see fig. 2(102)) is configured to process the audio signal and to send a first portion (126) of the output signal (signal from 126) to the amplifier module (120) and a second portion (128) of the output signal to the transmitter (122,150 and fig. 1(110) and see page 4 [0034]-[0044]).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Shdema into Swix to provide more efficiency to control communication system.

Consider claim 64, Swix does not explicitly teach the device, wherein the processor is configured to (a) extract characteristic from the audio signal, (b) code the characteristic into a control signal, (c) combine the audio signal with the control signal to form a combined signal, and (d) send the combined signal to the transmitter.

However, Shdema teaches the device, wherein the processor is configured to (a) extract characteristic from the audio signal(see fig.2(126)), (b) code the characteristic into a control signal(120), (c) combine the audio signal with the control signal to form a combined signal(128), and (d) send the combined signal (128) to the transmitter (122,150 and fig. 1(110) and see page 4 [0034]-[0044]).

Therefore, it would have been obvious to one of the ordinary skill in the at the time the invention was made to combine the teaching of Shdema into Swix to provide more efficiency to control communication system.

Consider claim 65, Swix teaches as modified by Shdema teaches the device wherein the control signal comprises at least one of the following: a volume level, a balance level, a fader level, a sub-bass level(in Shdema, see figs. 1, 2 and see page 4 [0034]-[0044]).

Consider claims 66-68, Swix teaches as modified by Shdema teaches the device wherein the transmitter is configured to transmit to at least two speakers, and wherein the processor is capable of generating different control signals to be transmitted to the two speakers (in Shdema, see figs 1-3 and see page 4 [0034]-[0044]); and the device wherein the transmitter is configured to transmit a combined control and audio signal to the selected speaker (in Shdema, see figs 1-3 and see page 4 [0034]-[0044])
; and the device wherein the control signal comprises at least one of the following: a sound processing selection, an equalizer level, a power on, a power off, a time delay, and a phase delay(in Shdema, see figs 1-3 and see page 4 [0034]-[0044]).

Response to Arguments

11. Applicant's arguments with respect to claims 47-81 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant argued rejection under 112 first paragraph(see the remarks page 7 second paragraph).

The examiner respond that claim 66 recited limitation " the transmitter is configured to transmit to at least two speakers, and wherein the processor is capable of generating different control signals to be transmitted to the two speakers". The applicant point out paragraph [0032] and [0116] which it will supported the limitation as recited in claim 66. However, the examiner reads it carefully and can not fine specification discloses how "the processor generating different control signals to be transmitted to the two speakers" will be performed. It is not supported in the specification nor in any claim originary presented and any figures. Therefore the 112 first paragraph rejection will be maintained.

Regarding applicant argued that Swix does not discloses "at least one input receiving an audio signal from at least one input device, the audio signal being encoded in a channel format having multiple channels; a processor converting the received audio signal into one or more signals comprising an output signal of a selected single channel" and "a transmitter connected to the plurality of speakers via a network and configured to transmit the output signal to the selected speaker" as recited in amended independent claim 47 and 75 (see the remarks page 7 last paragraph).

The examiner disagrees that. Swix teaches at least one input receiving an audio signal from at least one input device(see fig.1 (12,21,32), the audio signal being encoded in a channel format having multiple channels(95, 141,142,143,144); and a transmitter (142,143,144) connected to the plurality of speakers via a network and configured to transmit the output signal to the selected speaker(60 and see page 3 [0035]-page 4[0044]). It meets the limitation as recited in claim47 and 75.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lee (US PAT. 6,608,907) is cited to show other related wire, wireless, infrared, and powerline audio entertainment systems.

13. Any response to this action should be mailed to:

Mail Stop ____(explanation, e.g., Amendment or After-final, etc.)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Facsimile responses should be faxed to:
(571) 273-8300

Hand-delivered responses should be brought to:
Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lao, Lun-See whose telephone number is (571) 272-7501 The examiner can normally be reached on Monday-Friday from 8:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin, can be reached on (571) 272-7848.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 whose telephone number is (571) 272-2600.

Lao, Lun-See
/LUN-SEE LAO/
Examiner, Art Unit 2614
Patent Examiner
US Patent and Trademark Office
Knox
571-272-7501
Date 07-20-2009

/Vivian Chin/
Supervisory Patent Examiner, Art Unit 2614